

What is claimed is:

1. A solar light box comprising:

an upper step and a lower step, each step having a face and sides, the upper step substantially framing the lower step;
at least one light aperture in the lower step's face;
a light source mounted at least partially in the at least one light aperture;
a deep cavity in the lower step that is substantially defined by the lower step's face and sides;
a rain barrier ridge substantially around where an opening drops into the deep cavity;
at least one drainage passageway through the upper step; and
a solar panel substantially lying inside the upper step, between the upper step's sides.

2. The solar light box of claim 1 further comprising at least two slots that accept a mounting fork with ends; and a means for fastening the ends.

3. The solar light box of claim 1 further comprising a deep groove, substantially integral to the rain barrier ridge, that accepts a mounting hoop.

4. The solar light box of claim 1 further comprising: an energy-conserving switch; a sensor bracket, attached to the inside of the lower step; and a sensor aperture on the lower step's face such that the energy-conserving switch can be mounted partially inside the lower step.

5. The solar light box of claim 1 wherein the upper step's face contains at least as much surface area as the lower step's face.

6. The solar light box of claim 1 further comprising a tamper-resistant means for securing the solar panel to the solar light box.

7. The solar light box of claim 1 further comprising small holes in the lower step for displaying light emitting diodes.

8. The solar light box of claim 1 further comprising a camera aperture for mounting a camera to the lower step.

9. An outdoor solar powered light assembly that uses a solar panel as a protective lid comprising:

a solar light box having an upper step and a lower step, each step having a face and sides, the upper step at least partially framing the lower step;

at least one aperture in the lower step's face for mounting a light source;

a deep cavity in the lower step that is substantially defined by the lower step's face and sides;

a rain barrier ridge, substantially around an opening to the lower step's deep cavity, that is formed where the lower step's sides extend above a plane defined by the upper step's face;

a rechargeable battery;

a solar panel, substantially lying between the upper step's sides, and covering the lower step's deep cavity;

a charge controller that is electrically connected between the solar panel and the rechargeable battery;

a sensor bracket attached to the inside of the lower step;

a sensor aperture through the lower step;

an energy-conserving switch, electrically connected between the rechargeable battery and the light source, mounted to the sensor bracket and at least partially in the sensor aperture;

a means for securing the solar panel to the solar light box; and
a means for supporting the outdoor solar powered light assembly.

10. The outdoor solar powered light assembly of claim 9 wherein the light source is an array of white light emitting diodes.

11. The outdoor solar powered light assembly of claim 9 wherein the means for supporting the outdoor solar powered light assembly is a light pole mounted to the lower step of the solar light box.

12. The outdoor solar powered light assembly of claim 11 wherein the rechargeable battery is stored in a location that is remote from the solar light box, and wherein the rechargeable battery is electrically connected to the charge controller and the energy-conserving switch by wiring that at least partially passes through the interior of the light pole.

13. The outdoor solar powered light assembly of claim 9 wherein the rechargeable battery is stored in the deep cavity.

14. The outdoor solar powered light assembly of claim 9 wherein the means for securing the solar panel is at least one tamper-resistant fastener.

15. The outdoor solar powered light assembly of claim 9 further comprising at least one hinge for attaching a side of the solar panel to the solar light box such that the solar panel is capable of being lifted to expose the contents of the solar light box without completely removing the solar panel.

16. The outdoor solar powered light assembly of claim 9 further comprising: a camera aperture in the lower step; and a camera mounted at least partially in the camera aperture.

17. A method of making a solar cluster box unit (CBU) light comprising the steps of:

 molding a two stepped open solar light box such that an interior is exposed when viewed from a top side of the solar light box, and such that an upper step of the solar light box substantially frames a lower step of the solar light box;

 molding a rain barrier ridge substantially between the upper step and lower step;

 forming at least one light aperture in the lower step's face;

 forming a sensor aperture through the lower step;

 mounting a light source at least partially inside the at least one light aperture;

 mounting an energy-conserving switch at least partially inside the sensor aperture;

 electrically connecting the energy-conserving switch between a rechargeable battery and the light source;

 electrically connecting a charge controller between a solar panel and the rechargeable battery;

 covering the rain barrier ridge and the lower step of the two stepped open solar light box with the solar panel; and

 supporting the solar light box to a light pole in a fixed position

substantially above a CBU.

18. The method of claim 17 further comprising the steps of:

mounting a camera to the lower step of the two stepped open solar light

box;

mounting a recording device inside the CBU; and

electrically connecting the camera and rechargeable battery to the

recording device.

19. The solar light box of claim 17 wherein the rechargeable battery is stored inside the CBU, and wherein the rechargeable battery is electrically connected to the charge controller and the energy-conserving switch by wiring that at least partially passes through the interior of the light pole.

20. The solar light box of claim 17 further comprising the steps of forming small holes in the lower step; mounting light emitting diodes inside the small holes; and signaling the light emitting diodes to flash when the energy-conserving switch detects motion near the CBU.